

## ABSTRACT OF THE DISCLOSURE

5 Provided are methods for directed mutagenesis and selection of MHC Class II proteins and single chain proteins with improved conformational stability and/or binding affinity for at least one cognate ligand. The improved proteins are useful for identification of T cells that are specific for the MHC Class II proteins and for treatment of disorders including autoimmune diseases, with the disorder determining the choice of the particular improved protein, peptide-protein complex or other ligand protein complex.

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